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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/661,815	09/15/2003	Joseph D. Rocci	2094.0070001	7358

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WASHINGTON, DC 20005

EXAMINER

MENDOZA, JUNIOR O

ART UNIT	PAPER NUMBER
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4115

MAIL DATE	DELIVERY MODE
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10/12/2007

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/661,815	Applicant(s) ROCCI ET AL.	
	Examiner Junior O. Mendoza	Art Unit 4115	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 13 September 2002.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-9 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-9 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

2. **Claims 1 and 2** are rejected under 35 U.S.C. 102(e) as being anticipated by Bacon et al. (Pub No US 2004/0139476). Hereinafter referenced as Bacon.

Regarding **claim 1**, Bacon discloses an addressable cable television tap (106) in a communication implemented in a cable television system which is connected to a receiving equipment (108) connected to television (110), paragraph [0008] also exhibited on fig 1, which reads on “an addressable control module for coupling to the passive cable television subscriber tap”. Moreover, Bacon discloses a RF relay (132) which either passes the RF signal through or terminates the signal into a 75 ohm resistor (134), where such RF relay (132) is located inside an addressable cable television tap (106), paragraph [0031] also exhibited on fig 1 and fig 2, which reads on “a RF switch module for coupling to a subscriber drop fitting located on the passive cable television subscriber tap and coupled to said control module”. Moreover, Bacon discloses that the distribution system (104) spreads the signal to the addressable taps

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(106) and CATV system (100) implementing coaxial cables connections, where all coaxial connections contain a probe, paragraph [0022] also exhibited on fig 1, which reads on "and a probe assembly for coupling said addressable control module to the passive cable television subscriber tap".

Regarding **claim 2**, Bacon discloses everything claimed as applied above (See claim 1), in addition, Bacon discloses a splitter module (123) that is connected to a receiver (122) that sends instructions to the microcontroller (116), which controls each relay (132) (RF switch module) through an internal wire (control wire interface) as exhibited by figure 2, paragraph [0028], [0029] and [0031], which reads on "wherein said addressable control module comprises a control wire interface for coupling one or more control wires to corresponding RF switch modules".

3. **Claims 3, 4 and 5** are rejected under 35 U.S.C. 103(a) as being unpatentable over Bacon in view of Farmer et al (Patent No 5,331,412). Hereinafter referenced as Farmer.

Regarding **claim 3**, Bacon discloses everything claimed as applied above (See claim 1), in addition, Bacon discloses a RF relay (132) which either passes the RF signal through or terminates the signal into a 75 ohm resistor (134), where such RF relay (132) is connected to a receiving equipment (108) through an output port (115), paragraph [0031] also exhibited on fig 1 and fig 2, which reads on "an RF switch coupled to a subscriber drop cable". Moreover, Bacon discloses a power supply (130)

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(voltage rectifier) that converts the AC input voltage to a regulated DC voltage for powering the components on the device, including the microcontroller (116) and relay (132) (RF switch), where the input to such power supply comes from input signal (113), paragraph [0030] also exhibited on fig 2, which reads on "a voltage rectifier for providing power to said RF switch having an input coupled to a control signal and an output coupled to said RF switch". Moreover, Bacon discloses a microcontroller (116) that receives instructions from head-end (102) to control the addressable multi-state switches, such as relays (132), paragraph [0024] also exhibited on fig 2, where such microcontroller receives instruction from receiver (122) which demodulates the received RF signal into digital data, paragraph [0028] and [0029], which reads on "a microcontroller for controlling and monitoring said RF switch having a control input coupled to the control signal".

However, Bacon fails to disclose a capacitor coupled between a ground signal and an output of said voltage rectifier *and* a power input coupled to an output of voltage rectifier, an input coupled to said RF switch for receiving monitoring information related to the subscriber drop cable and an output coupled to said RF switch for controlling the operation of said RF switch. However, the examiner maintains that it was well known in the art to provide such elements, as taught by Farmer.

In a similar field of endeavor Farmer discloses a tamper resistant apparatus for a CATV system. In addition, Farmer discloses a diode (51) acting as a voltage rectifier, whose output is connected to a grounded capacitor (55), column 5 lines 11-15 also exhibited on fig 2, which reads on "a capacitor coupled between a ground signal and an

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output of said voltage rectifier". Moreover, Farmer discloses a power supply (48) connected to the output of diode (51), which is acting as a voltage rectifier, as exhibited on fig 2; in addition, Farmer discloses a microcontroller (52) connected to signal relay (34) which is used to control the signal flow to unit (16), where the microcontroller (52) receives instructions to be executed to a certain address from transistor (50), column 4 lines 56-66 also exhibited on fig 2, which reads on "a power input coupled to an output of voltage rectifier, an input coupled to said RF switch for receiving monitoring information related to the subscriber drop cable and an output coupled to said RF switch for controlling the operation of said RF switch"

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Bacon by specifically providing a capacitor coupled between a ground signal and an output of said voltage rectifier *and* a power input coupled to an output of voltage rectifier, an input coupled to said RF switch for receiving monitoring information related to the subscriber drop cable and an output coupled to said RF switch for controlling the operation of said RF switch, as taught by Farmer, for the purpose of providing a capacitor that would store a charge that can power the device during interruptions, in other words the capacitor would help get rid of the ripple caused by the AC; moreover, the power source is connected to the switch in order to power it up.

Regarding **claim 4**, Bacon and Farmer disclose everything claimed as above (see claim 1); in addition, claim 4 is a variation of claim 3. Therefore, claim 4 stands

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rejected for the same reasons as stated above (see claim 3) since it is inherent to the apparatus claimed in claim 3, respectively.

Regarding **claim 5**, Bacon discloses everything claimed as applied above (See claim 4), in addition, Bacon discloses a device able to receive a plurality of signals, each of the plurality of signals includes an address and a command that associates with each attached receiving device, where each address correlates with a port on the addressable tap, and therefore to its own relay or switch as well, claim 1 in reference also exhibited on fig 1, which reads on "plurality of RF switches". However, Bacon fails to disclose that said plurality of RF switches monitor a plurality of RF frequency bands within the subscriber drop line and support independent on/off control of each RF frequency band with the plurality of RF frequency bands. However, the examiner maintains that it was well known in the art to provide such element, as taught by Farmer.

In a similar field of endeavor Farmer discloses a Tamper resistant apparatus for a CATV system. In addition, Farmer discloses that a variety of frequencies could be used to communicate with the single dwelling interdiction (SDI) unit (16), column 3 lines 28-40, where the SDI is located on the subscriber's house as shown in fig 1, which reads on "said plurality of RF switches monitor a plurality of RF frequency bands within the subscriber drop line and support independent on/off control of each RF frequency band with the plurality of RF frequency bands".

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Bacon by specifically providing said plurality of RF switches monitoring a plurality of RF frequency bands within the subscriber drop line and support independent on/off control of each RF frequency band with the plurality of RF frequency bands, as taught by Farmer, for the purpose of further providing flexibility to the device which would allow it to be implemented for different frequencies each having its own switching capabilities.

4. **Claims 6, 7, 8 and 9** are rejected under 35 U.S.C. 103(a) as being unpatentable over Bacon in view of I. S. Blonder (Patent No 3,001,169). Hereinafter referenced as Blonder

Regarding claim 6, Bacon discloses everything claimed as applied above (See claim 1), in addition, Bacon discloses that the distribution system (104) of the invention can encompass multiple distribution lines that can include local or long distance lines, where such distribution is implemented using coaxial cables, paragraph [0022], which reads on "tapping into a coaxial cable". However, Bacon fails to disclose a further description on how the connections are made. However, the examiner maintains that it was well known in the art to provide such elements, as taught by Blonder.

In a similar field of endeavor Blonder discloses a transmission line connector. In addition, Blonder discloses an inner conductor (3) as shown in fig 13, which reads on "a seize screw probe for tapping into a coaxial cable". Moreover, Blonder discloses threaded connection (42) shown in figure 11, which reads on "a threaded attachment for

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affixing said addressable control module to a seizure screw located on the passive cable subscriber tap”

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Bacon by specifically providing element, as taught by Blonder, for the purpose of providing a connection between the coaxial cable and the control module, where such connection would be secured by a threaded portion.

Regarding **claim 7**, Bacon discloses everything claimed as applied above (See claim 6), in addition, Bacon discloses an input port (113) which receives the signal and powers up the power supply (130), paragraph [0027] also exhibited on fig 2, which reads on “cable television subscriber tap to provide access to network power and control signals”. However, Bacon fails to disclose that said seize screw probe taps a tap seizure screw of the passive cable television subscriber tap. However, the examiner maintains that it was well known in the art to provide such element, as taught by Blonder.

In a similar field of endeavor Blonder discloses a transmission line connector. In addition, Blonder discloses a threaded adapter (50) modified for connection to inner conductor (3), column 3 lines 67-75, which reads on “said seize screw probe taps a tap seizure screw of the passive cable television subscriber tap to provide access to network power and control signals”.

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Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Bacon by specifically providing element, as taught by Blonder, for the purpose of a way to connect the control module to a coaxial cable.

Regarding **claim 8**, Bacon and Blonder disclose everything claimed as above (see claim 1); in addition, claim 8 is a variation of claim 6. Therefore, claim 8 stands rejected for the same reasons as stated above (see claim 6) since it is inherent to the apparatus claimed in claim 6.

Regarding **claim 9**, Bacon and Blonder disclose everything claimed as above (see claim 8); in addition, claim 9 is a variation of claim 7. Therefore, claim 9 stands rejected for the same reasons as stated above (see claim 7) since it is inherent to the apparatus claimed in claim 7.

Citation of Pertinent Prior Art

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

- James et al. (Patent No 6,694,517) – a broadband communication network with a plurality of switching units controlling subscribers access to the network.
- Myers (Patent No 6,372,991) – crimp less termination for a coaxial cable.

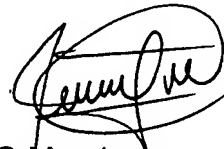
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Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Junior O. Mendoza whose telephone number is 571-270-3573. The examiner can normally be reached on Monday - Thursday 8am - 5pm EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jefferey Harold can be reached on 571-272-7519. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.



Junior O Mendoza
Examiner
Art Unit 2609

JM
October 2, 2007


RYAN YANG 10/4/07
PRIMARY EXAMINER